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The Body as Interactive Display
Examining Bodies in a Public Exhibition

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The Body as Interactive Display

Examining Bodies in a Public Exhibition

Abstract

„Body Worlds‘ is an exhibition of human bodies that currently tours Europe, the Far East and the USA. The public display of ‘real’ human bodies has caused public controversy and debate about the moral and educational value of the exhibition. However, relatively little academic research has been undertaken to explore how visitors see and reflect on the exhibits. In this journal, Walter recently examined comments people left in the exhibition’s comment-books to reveal how people see the bodies. His investigation provides interesting insights into people’s understanding of and attitude to Body Worlds. This paper complements Walter’s findings by analysing video-recordings of visitors looking at the ‘plastinated’ bodies at the showing of Body Worlds in London in 2002/03. The analysis reveals how people anatomise the exhibits and consider them in the light of the knowledge and experience of ‘real’ human bodies, such as those of other people and their own. The paper concludes with a discussion of how the observations and findings from the analysis bear upon debates on Body Worlds and in the sociology of health and illness.

Keywords

Body Worlds, anatomy, body image, ethnomethodology, video

The Body as Interactive Display

Examining Bodies in a Public Exhibition

Günther von Hagens' exhibition "Body Worlds" shows "real human bodies". It is currently touring Europe, the Far East and the USA. It consistently attracts large numbers of visitors and occasions discussion and debate about the nature of the exhibits;- dead human bodies preserved by virtue of a technical process called "plastination". Supporters of the exhibition emphasise its potential to raise people's awareness of the human body and to influence their life-style. They consider the bodies on display as 'scientific' specimens without relationship to the identity of the living body of their donors. The exhibition management argues that Body Worlds can help breaking down the barrier between lay perspectives of the human body and the knowledge and expertise of professions of medicine (von Hagens 2002). Critics of Body Worlds however dispute its educational value and view the exhibition as immoral, unethical and unlawful. They argue that the transformation of "corpses" into exhibits is illegal and the display of the plastinated bodies in "life-like poses" enhances their individuality (Wetz & Tag 2001).

The exhibition coincides with the emerging interest in the body in the social sciences. Sociological studies explore how the body is involved in people's acting in and experiencing of the world (Crossley 1995b, Howson & Inglis 2001, Shilling 2003). They illuminate the ways in which people modify the appearance of their body to project a particular image of themselves in social situations. Research looks at tattoos, cosmetic surgery and body-building (Featherstone & Turner 1999, Negrin 2002). It sheds light on how the appearance of the body is used to display the image of a "healthy body" (Monaghan 2001) and to raise people's awareness of the condition of their body.

Researchers from psychiatry and psychology draw on the concept of "body image" to explore how people experience and relate to their own body (Cash & Pruzinsky 2002, Castle & Phillips 2002, Fisher 1973, Schilder 1950). These studies largely focus on external aspects of the body and the appearance of the body. In recent years, social scientific and cognate research has explored the use of 'body image' to help understanding the relationship between people's experience and understanding of their body and the ways in which it is seen by others (Waldenfels 2000, Williams 2001). Body image is sometimes dismissed as a concept stemming from "pop-

psychology” with little use for sociological research on health and illness (Kelly & Field 1997). At the same time, however, its potential as a link between debates about bodily conditions in biology, psychology and sociology is highlighted (Williams 1996, 2001). These debates have been of particular importance for research concerned with the relationship between people’s life-styles and their bodily condition. However, they often either have a theoretical focus or are concerned with narrative and discourse rather than with interaction and talk.

Our investigation of Body Worlds has arisen as part of a programme of research concerned with people’s conduct and interaction in museums, galleries and science centres. By scrutinising video-fragments recorded in a wide range of museum we have begun to reveal how people view, examine and discuss exhibits with others (Heath & vom Lehn 2004, vom Lehn, Heath & Hindmarsh 2001). Body Worlds provides us with an opportunity to explore how people inspect the plastinated bodies by seeing them in the light of their own bodies and those of others. The paper complements recent studies that use visitors’ opinions of and comments about Body Worlds as resources to theorise about the ways in which people view and make sense of the plastinated bodies (Charlton, Burbaum, Staiblin & Zander 2001, Walter 2004b).

The paper considers video-fragments collected at the showing of Body Worlds in London in 2002. The analysis sheds light on how people produce an understanding of the plastinated bodies and how this understanding of the exhibits bears upon the ways in which they make sense of their bodies and those of others. It explores how people inspect, identify and make sense of different parts of the plastinates by building up images of the bodies on display. It investigates how people relate these images of the plastinates to the bodies of others and thus come to see the exhibits as ‘real’. The paper also illuminates how visitors reflect on and produce an understanding of their own bodies when they examine the plastinates. It therefore makes a small contribution to our understanding of how exhibitions may contribute to science and health education and touches on a range of issues of contemporary relevance to the sociology of health and illness. We begin by discussing the controversy and debate about Body Worlds.

Body Worlds – Exhibition and Controversy

Body Worlds is an exhibition that shows body parts and organs as well as whole human bodies. It is based on Günther von Hagens' invention of plastination that makes possible the creation and durability of human remains. Plastination involves the replacement of bodily fluids by synthetic ones. It enables the conservation of the body and its display in "life-like poses" that reveal the spatial relation between organs inside the human body (von Hagens 2002). The exhibition in London showed 25 whole body plastinates displayed in poses such as the Swimmer, the Runner, the Chess Player and others. It also houses a small number of blood vessel plastinates and skeletons as well as bones and organs exhibited in conventional glass-cases (von Hagens 2001).¹

The London exhibition has been organised to create a dramatic experience leading visitors progressively from bones and skeletons to ever more elaborate plastinates. The London showing begins with skeletons and bones laid out in glass-cases before on the next floor visitors encounter the whole body plastinates. Half-way through their visit people find the horse-rider, a large display showing a man sitting on a life-size horse holding a human brain in one hand and the brain of a horse in the other. This exhibit rekindles the visitors' interest in the exhibition that by now may have been exhausted after viewing a large number of glass-cases and plastinates. From here, people move on to the fertility section that houses a selection of human embryos and fetuses organised by age. The section culminates in the display of a whole body plastinate of a woman pregnant in the 8th month. Visitors leaving the fertility section walk along a series of fetuses with congenital deformities before reaching a flight of stairs leading to the shop and exit.

The exhibition is relatively successful with the public. Since it first opened in 1995 it has attracted more than 11 Million visitors. The public appeal of the exhibition is often ascribed to the unusual content of the exhibition. Some critics of Body Worlds argue the exhibition of 'real human bodies' and the way in which the bodies are displayed, would encourage voyeurism and attract only the "ghoulish" parts of the population (BBC 2002); they object the exhibition on ethical and moral grounds (Rager & Rinsdorf 2001). Other commentators highlight the educational value of the exhibition and argue that it provides the public with a unique opportunity to learn

about the human body. They even suggest the exhibition may be able to influence people's life-styles and habits for the better (Meek 2002, Searle 2002).

Despite the public debate about Body Worlds relatively little academic research has been undertaken concerned with the exhibition. There are of course the important studies by Fonseca (2000), van Dijk (2001) and Walter (2004a,b). They focus on the origin, aesthetics and meaning of the plastinates as a form of dealing with and disposing of dead bodies. They also explore how people see and reflect on the plastinates. Based on interviews with visitors they find that people generally display a positive attitude towards the exhibition; they may even change their eating habits and stop smoking in the light of their experience of Body Worlds. However, sometimes people voice their disapproval of the aesthetics of the displays (Lantermann 2002).

A few studies examine comments, visitors write in books when leaving the exhibition. They largely agree with the findings of the visitor surveys (Charlton, Burbaum, Staiblin & Zander 2001). Walter's (2004b) examination of the comment books compares the ways in which people view the plastinated bodies with the 'clinically detached gaze' employed by medical students and professions in medicine. He reveals that visitors see the plastinates with a "scientifically detached" gaze but "obstinately connect bodies with persons" and mix emotion with clinical detachment. His observation confirms Hirschauer's (2002) argument that the design of the plastinates highlights the individuality of the bodies. Hirschauer finds that people's behaviour in the exhibition reflects the relationship they build with the bodies on display; they talk relatively little and only with a low, solemn voice at the exhibits. He likens the silence exhibited at the plastinated bodies to the "museum discipline" often reported from art museums. Rather than talking with each other people establish a communicative relationship with the plastinated bodies (Brock 2001, Hirschauer 2002).

These observations stand in some contrast to von Hagens' (2002) assertion Body Worlds would provide the general public with the same way of looking at the human body that anatomists, medical students and doctors employ in their work. However, they do not address the argument of supporters of Body Worlds who highlight the educational import of the exhibition. Supporters of Body Worlds argue that by virtue of looking at and examining the plastinated bodies people develop an image of their own inner body. This 'body image' forms the basis for people's understanding of the delicateness of the body and the origin for changes in life-styles and habits.

Body Image and Social Interaction

In recent years, there has been a growing interest in psychiatry and cognate areas of research to explore the relationship between people's image of their bodies and their life-styles and habits (Cash & Pruzinsky 2002, Castle & Phillips 2002). The concept of "body image" originates from Paul Schilder's (1950) "The Image and Appearance of the Human Body". It is described as the combination of people's concept and physical experience of their body (cf. Fisher 1973, Mayou 1985). It "represents a sort of 'map', 'grid' or 'representational reference point' which registers the ever changing libidinal intensities and meanings the subject invests in his or her body; a form of investment which measures not only the psychical but also the physiological changes the body undergoes in the course of its day-to-day actions and performances" (Grosz 1994: 83). Recent research explores how the loss of limbs or eating disorders influence people's image of their body and their behaviour (Cash & Brown 1987, Gallagher & Cole 1995, Gallagher & Meltzoff 1996).

Schilder (1950: 16) emphasises that the experience of our "body-image" is not an exclusive individual achievement or process but closely interwoven with our experience of the bodies of others. He explores how "the body-image expands beyond the confines of the body" (1950: 212); a hat, a stick and clothes as well as bodily excrements all form part of the body image (ibid.). Recently, research in the cognitive sciences has begun to consider the relationship between body image and 'the structure of the self'. It explores how body image is influenced by the ways in which people assess and evaluate others by virtue of the body image they project into the social world by virtue of their bodily appearance and behaviour (Lakoff & Johnson 1999). These studies highlight the social properties of body image, but rarely refer to the longstanding interest of sociological research in the ways in which people use the body to manage the impression they give off themselves (Goffman 1959).

In the social sciences there is a growing concern with the ways in which people see their own bodies and are aware of the impression they project of themselves by virtue of their bodily appearance. Studies explore how fashion items, tattoos or cosmetic surgery are used to produce and modify body images (Featherstone & Turner 1999, Negrin 2002, Turner 1999). Research in the sociology of health and illness investigates how people experience and talk about their inner body and its functioning. The concept of "illness narratives" is employed to reveal the patient's

view on her/his (ill) body. Studies produce an understanding of the impact of illness on people's biography and sense of identity by inspecting people's talk (Bury 2001, Charmaz 1991, 1995, Hydén 1997, Kohler Riessman 2003, Robillard 1999). Due to the focus on language and talk the body itself as well as the corporeal interaction between doctor and patient remain largely neglected by the research.

A small but growing corpus of research has drawn attention to the existential import of the body's acting- and being-in the world. In drawing on phenomenological research studies argue that participants experience their body in and through their actions as well as through the ways in which they are seen and acted upon by others (Crossley 1995a, 1996). They draw attention to how people talk about and render visible invisible bodily conditions and phenomena in social interaction at home (Goodwin 2000) and in medical settings (Heath 1986, 2002). They explore the ways in which people produce accounts of bodily experiences in interaction with others. Heath (2002) for example illuminates how patients demonstrate pain by overlaying parts of their bodies with talk and gestures. He also shows how doctors themselves transpose the patient's experience of pain on their own body to display their understanding of a person's suffering.

Body Worlds provides us with an opportunity to contribute to these recent debates concerned with how people display their experience and understanding of the human body in an exhibition. It allows us to explore how participants produce an image of the body as they view, examine and discuss human bodies on public display. This paper complements previous research that uses interviews and comment books to examine how visitors see and reflect on the body. It inspects video-recordings of visitors examining the exhibits to reveal how the plastinated bodies are actually looked at and made sense of when visitors face them in the exhibition.

Methodological Considerations

The study arises in the context of a programme of research in which we have begun to explore visitors' conduct and interaction in museums and galleries (vom Lehn, Heath & Hindmarsh 2001). We are particularly interested in the ways in which people experience exhibits in and through their interaction with others, both those they are with and others who happen to be 'within perceptual range of the event' (Goffman 1981). The research involves video-based field studies in museums including major

art museums as well as a range of science centres and museums. It also includes participation in the design and deployment of exhibits, in particular mixed media art works (Heath, Luff, vom Lehn, Hindmarsh & Cleverly 2002, Hindmarsh, Heath, vom Lehn & Cleverly 2002). Our particular interest is in exploring the ways in which people 'respond' to these works and how they serve to facilitate, engender and encourage particular forms of participation and collaboration.

The paper uses video-recordings as principal data. The data have been gathered when *Body Worlds* was shown at the Atlantis Gallery in London between March 2002 and February 2003. The main bulk of the data was collected during six weeks in July and August 2002. On each day of data collection the exhibition was attended by more than 1000 people. The data feature a wide range of visitors including, individuals, couples, families as well as school groups and professionals. Altogether we have gathered approximately 100 hours of video and a substantial corpus of field observations. We have also conducted a few informal interviews with the local exhibition management and a few selected visitors.

Access to the exhibition was gained via the local management of *Body Worlds* at the Atlantis Gallery. We discussed with them our research interests and previous research in other science exhibitions as well as their interest in the study and possible problems and issues with collecting video-data in *Body Worlds*. The site management was very interested in finding out about visitors' talk and behaviour at the plastinates to complement existing research concerned with *Body Worlds*. It also raised a few ethical and practical concerns. For the purpose of this study, we placed notices near the exhibit(s), to inform, and secure the support of visitors. The notices explained the purpose of the research and that data would be used for research and teaching purposes only. They also provided visitors with the opportunity to refuse to be recorded and to have the recordings wiped if they were unhappy in any way. Many visitors read the signs and a small number approached the researcher to discuss the nature of the project further; no visitors refused to participate.

The video-data were collected with a conventional video-camera mounted on a tripod to film the action at selected exhibits. The exhibits were selected after extensive field observation and in discussion with the local management. We have chosen exhibits that show various bodily conditions and phenomena in different ways; they are popular with visitors and were pointed out by the management as particularly

interesting due to their design or the ongoing media coverage. The study includes whole body plastinates as well as specimens displayed in glass-cases.

For the collection of the data, the researcher left the camera to record and only returned to change tapes. During the recording the researcher took field notes of events at the exhibits and other parts of Body Worlds. The notes together with other materials, such as informal interviews with visitors and the exhibition management, exhibit specifications, copies of labels, gallery guides and the like, provide important resources with which to situate and understand the conduct and interaction of visitors. For example, it is not unusual for people to selectively voice instructions or labels to others as they approach or examine an exhibit. The analysis of the interaction needs to consider how participants occasion, embed, or transform, this information within talk and interaction. Moreover, video and audio recording inevitably provide a selective view of events, and while this view may encompass a broad range of actions and activities that arise at an exhibit, it can be useful to know what else may be happening more generally within the scene. As part of the data collection therefore field observations, information from materials and comments from interviews and discussions are systematically interleaved, with recorded data, and where relevant, take these into account in the analysis of the participants' action and interaction.

The analysis draws on Goffman's (1963, 1971) studies of behaviour in public places and developments in the social sciences, namely ethnomethodology (Garfinkel 1967) and conversation analysis (Sacks 1992). It primarily focuses on the action and interaction of visitors, their talk, visual and material conduct. It draws on the growing body of research concerned with the social and interactional organisation of visual, vocal and tactile aspects of human conduct (Goodwin 1981, Heath 1986). The approach directs analytic attention towards the resources, the practices and reasoning on which participants rely in the production of social actions and activities and in making sense of the conduct of others. It focuses in particular on the sequential character of the participants' conduct and the ways in which they coordinate their examination of the exhibits with others, both those they are 'with' and others who happen to be in the 'same space'.

The thrust of the analysis has been developed with regard to the recorded data. It proceeds on a 'case by case' basis and involves the highly detailed examination of particular actions with regard to the immediate context and a particular interactional environment in which they arise. The analysis involves the transcription of

participants' talk and bodily action and the detailed examination of the interactional character of particular actions and activities (Goodwin 1981, Have 1998). By comparing and contrasting actions and activities between various fragments we begin to identify patterns of conduct and interaction. More detailed discussions of the practicalities of data collection and analysis can be found in various publications by Goodwin (1981, 1994b) and Heath and colleagues (Heath 1997, 2004, Heath & Hindmarsh 2002).

This paper explores how the plastinated bodies and body parts feature in visitors' action and interaction. It examines video-fragments to reveal the ways in which visitors make relationships between the exhibits and their own bodies. In common with more traditional ethnography, we select instances for publication that provide interesting or particularly clear examples to reflect the more common themes that we explore.

Anatomising the Body

Body Worlds makes the structure of the inner body visible. The plastinated bodies are displayed in various life-like poses to exhibit different images of the inner body. As people enter the exhibition they walk past glass-cases housing a variety of bones before they encounter the whole body plastinates. One of the first plastinated bodies that visitors see at the London showing is a man crouched over a chessboard, the Chess Player. The exhibit is a man's skeleton that reveals some tissue and nerve fibres leading from the brain along the spinal cord and the body's limbs (Image 1.0ab.). It is perhaps worthwhile considering an example to begin to show how visitors view such exhibits.

Image 1.0a.



Image 1.0b.



The fragment begins when Lorraine and Anne orient to the exhibit's front and discuss a particular exhibit feature while Mary examines the Chess Player's brain. After a few moments, Mary attempts to draw her companions' attention to the nerve fibres on the brain, which she considers noteworthy. She poses a question and thrusts her forefinger along the fibres, thus delineating their location and delicacy.

Transcript 1:

M: so what are
A: () surprising
L: mmh mh
M: what are all these little things they all look like
little nerves running over (your) head?
(1.3)
L: (well pain)
M: yah but what are they you know are they little
nerves over the brain or what?

...

Image 1.1.



M: So what are

As Mary thrusts her finger along the fibres her gaze alternates between Lorraine and the plastinate's head. Her companions first do not attend to her initial utterance. She waits a moment and when noticing a pause in their talk says, "what are all these little things" (Image 1.2.). She shoves her forefinger alongside the nerve fibres on the Chess Player's head and completes her utterance by looking to Lorraine in anticipation of an explanation. Lorraine attends to her friend's actions by leaning over to her and begins to characterise the nerve fibres (Image 1.3.).

Image 1.2.



M: what are all these little

Image 1.3.



L: well they are nerve fibres

We can begin to see how participants examine the plastinates. The three women render selected features of the Chess Player as relevant for another. They point and reference parts of the exhibit to examine more closely while leaving other exhibit features unnoticed. The exhibit features gain their momentary relevance and significance in the interaction between the visitors. The action and activity that lead to the interactional constitution of the exhibit are mundane, routine practices that anatomise the body on display. In the case at hand, the participants examine the nerve fibres on the Chess Player's head; a moment later, they orient to the front of the exhibit and inspect its face. Thus, the participants moment-by-moment obtain a sense of a particular area of the plastinate.

Consider another fragment to further explore how visitors anatomise the plastinates. The exhibit is the Reclining Pregnant Woman. The specimen lies on one side exposing an eight months old foetus in her womb (Image 2.0).

Image 2.0



Visitors arriving at this exhibit have walked past a series of embryos and fetuses that display the developmental stages of the human body from the first few weeks to the 38th week. The fragment begins when a woman and her two children examine the exhibit. The mother begins to point out particular features of the plastinate and delineates the process of giving birth.

Transkript 2: Mother (M) , Daughter (G) and by-standing boy

M: Look (.) that's the umbilical cord yah?
 G: [mhm
 M: no there pushed it eh when pregnancy starts when labour starts
 () overhere
 G: mhm
 M: when it's ready the muscles all these musc
 muscle around start like that (.) make contractions
 pushes
 G: it hurts hehe
 M: coming out there
 G: it hurts hehe
 M: sometimes they take it out through your tummy
 G: so that baby has to go through that tiny hole
 M: yah
 G: my god

She stands behind her two children and refers to a few selected parts of the plastinate. She locates the umbilical cord and with an open hand indicates the position of the womb and the muscles surrounding it (Image 2.1.). During her description of the womb the children display their understanding of the structure of the exhibit, “mhm”,

Image 2.1.



M: when it's ready

Image 2.2.



M: Make contractions

Image 2.3.



pushes
 G: It hurts

allowing their mother to move from the mapping of the Reclining Pregnant Woman to explaining the functioning of the body when giving birth. She overlays the womb with gestures that animate the contractions of the muscles. She opens and closes her left hand, „muscles around start like that (.) make contractions“, and then reveals how the

baby is eventually pushed out of the woman's body (Image 2.2. & 2.3.). She points towards the bottom of the exhibit and moves her forefinger back and forth indicating where the baby will emerge, „coming out there“ (Image 2.4. & 2.5.). Her daughter shows her understanding of the explanation by providing an assessment of the experience of giving birth, „it hurts“, and repeats her understanding when the mother arrives at the point when the baby is pushed out, „it hurts“. Throughout the explanation the boy stands to the side and silently observes the action.

Image 2.4.



M: coming out there

Image 2.5.



G: It hurts hehe

By virtue of pointing and referencing the mother identifies and renders noteworthy features of the Reclining Pregnant Woman. She points at the umbilical cord and then with an open hand locates the womb. When the girl displays to have seen these exhibit features her mother continues to explain the artefact. She shifts from identifying exhibit features at the artefact to describing the process of giving birth. She shows how the different parts of the womb work together to deliver the baby.

The managers and supporters of Body Worlds argue that visitors can see the plastinated bodies with the same clinically detached gaze as medical students and professionals examine human bodies (von Hagens 2002). They display the exhibits to expose certain parts of the body and influence visitors' orientation towards them (von Hagens 2001). Yet, in contrast to a medical examination where large parts of the body are covered by a blanket, in the exhibition the whole body is visible and accessible for inspection by the visitors.

The two fragments discussed here begin to reveal the ways in which visitors view and anatomise the plastinates in interaction with each other. Because all parts of the plastinate can be examined, it is up to the visitors to discriminate and identify areas of the exhibits that they wish to look at in more detail. As they arrive they look at different parts of the exhibit and then often turn to inspect some of their features in

more detail. By pointing and referencing these features they render them visible and relevant for each other. They discuss their location, their delicate design or their function as part of the body and thus momentarily create an image of the body that they inspect in the situation at hand. Thereby, the bodily actions of the participants are critical for how each other views the exhibits. What they look at and how it becomes relevant in the interaction is subject to the contingent emergence of the situation at hand. It may arise from a visitor's action at the exhibit, their inspection of its features, their previous medical knowledge, the reading of a text-panel or label, or be influenced by the actions of a companion or others who point out exhibit features and render them momentarily relevant.

Realising the Body

A crucial argument of supporters and critics of Body Worlds is the 'realness' of the bodies on display. Despite the ongoing argument concerning the display of 'real' human bodies studies that explore how the realness of the exhibits features in participants' examination of the plastinates have not been carried out. Yet, a wide range of theories has been developed as to the ways in which people see and respond to the exhibits. The supporters and managers of Body Worlds argue that the plastinates provide visitors with an opportunity to seeing the human body, as it normally is accessible only to medical students and professions in medicine. The displays allow the general public to examine the inner structure of the body with a detached and unemotional attitude. People can learn about the body and the way it functions by looking at and inspecting real specimens. Scholars in law, theology and sociology dispute this argument. They assert the display of 'real' bodies induces inappropriate ways of looking at corpses (Höhn 2001, Meek 2002, Trösken 2004, Wetz & Tag 2001).

Observations in the exhibition rarely find 'inappropriate behaviour'. People generally do not display emotional response at the exhibits, despite the exhibition management's claim that visitors regularly faint when facing the plastinates. When on an occasion teenagers exaggerate an emotional response at an exhibit they quickly recognise the impropriety of their conduct and reinstall the 'museum discipline' (Hirschauer 2002). They examine the exhibits and anatomise the plastinates by selecting certain features to inspect and make sense of. Consider the following

fragment recorded at one of the glass-cases that contain human organs. The specimens in question are lungs displayed to allow visitors to compare and contrast healthy organs with organs that are infected by different diseases like tuberculosis or cancer.

Image 3.0. – Cancerous Lung



We join the action when Anne inspects the exhibit for a few moments and then is joined by Pete. As Pete walks behind Anne to a position to her left she says, “I look like that”. She completes her utterance and notices that Pete is behind her where he cannot see the artefact. When he stands to her left she produces a brief laughter followed by a glance at her companion and then at the specimen. Pete adjusts his position, leans over the glass-case and inspects the lung of a smoker and neighbouring specimens.

Transcript 3

P: (smokers)

A: I look like that
hehe
(6.9)
P: No you probably look like that
() your dad's smoking
J: he?
P: your dad's smoking (.) he looks like that
J: mhm
A: Yah
...

Image 3.1.



Image 3.2.



While he inspects the specimens Anne walks behind his back to stand to his left. She reaches her new position when Pete draws her attention to another specimen by pointing at it and saying, “No you probably look like that”. A moment later, Jim arrives and Pete draws his attention to the ‘lung of smoker’ by pointing at the specimen and referring to the smoking habit of Jim’s father, “he looks like that”. Jim now stands by the case, looks at the lung and acknowledges the object.

Image 3.3.



Image 3.4.



The fragment illuminates how participants produce a reflective relationship between the exhibit they look at and their knowledge about another person’s bodily condition, life-style or habit. They use the exhibits and their knowledge about another person as resources to draw a companion to look at the artefact and see it in a particular way. The specimens in the glass-case are viewed and gain their relevance in the light of another person’s bodily condition or habit; and the condition and habit of that person is considered in the light of the exhibit at hand, “your father looks like that”. The lung

specimens can be considered ‘real’ because the participants can relate them to real people, relatives, friends or celebrities. In other cases, participants produce such relationship between relatives who just had undergone a heart operation and heart specimens in a glass-case, or between an aspect of the Chess Player and Christopher Reeve’s bodily condition, the late Superman actor who was paralysed for years after a horse-riding accident.

The following fragment further explores how people produce such reflective relationships between real bodies in- and outside the exhibition. Liz has discovered that the exhibit in question shows a ‘situs inversus’, a bodily condition where the organs in the human body are located in reversed positions compared to most people’s bodies (Image 4.0).

Image 4.0



Transcript 4:

- L: and I think that's what Bea's father had (.)
she said they ripped him open for (eh some) blood problem and
they ripped open his spleen because it wasn't where it's meant
to be
(.3) and e:h
(.3)
I think what she was describing was this she didn't know
exactly () when everything is reversed she she didn't
know but everything is in the wrong place
so your liver is now on the left, your spleen is on the right,
everything is literally (kind of)
- J: hmh
- L: and it says there
...
...

We join the action after Liz returns to the exhibit with John. They reach the torso and Liz begins to talk about Bea's father who when having undergone surgery was diagnosed with situs inversus. As they approach Liz can be heard talking about her

friend's father whose spleen was mistakenly "ripped open" in surgery because "it wasn't where it's meant to be".

As in the earlier fragment, the exhibit provides a participant with a resource to make sense of both, the object the visitors look at and examine, and a bodily condition of another

Image 4.1.

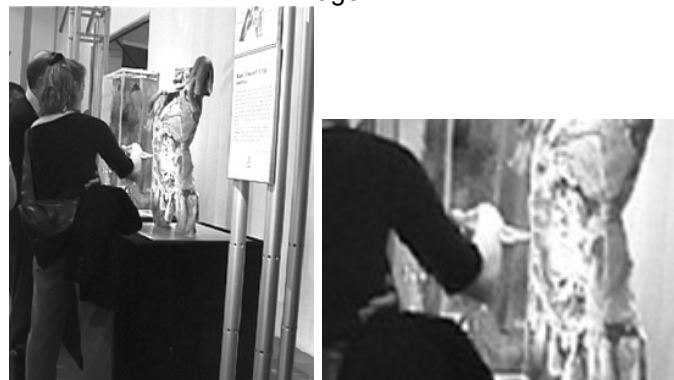


L: so your liver is now on the left

person. After a brief description of the situs inversus as the condition "Bea's father had" Liz turns to the exhibit. She demonstrates with her right hand the reverse structure of the organs in the

exhibit. She holds her hand horizontally between her body and the torso and repeatedly turns it over whilst saying, "everything is reversed" and "everything is in the wrong place". She then raises her arm slightly

Image 4.2.



L: your spleen is on the right

towards the centre of the torso and says, "your liver is now on the left"; she turns the arm over to form an open hand to the right of the liver in the torso (Image 4.1.), then orients to the spleen,

"your spleen is on the right", and turns her hand over from the right to the left (Image 4.2.).

Image 4.3.



L: everything is literally (kind of)

After having described and illustrated the condition of situs inversus with respect to two specific organs, the

liver and spleen, Liz prepares to describe situs inversus more generally. She opens

both her arms between her body and the torso and says, “everything’s literally (kind of)” and crosses her arms twice between the exhibit and her companion (Image 4.3.). Throughout the fragment John displays only very little response either to the exhibit or Liz’s characterisation of it. Only towards the end he indicates his understanding of Liz’s description, “hmh”. Liz then turns to the text-panel on the right to affirm her description and provides some additional information about situs inversus.

As in many other cases observed in Body Worlds one participant takes the initiative and provides a companion with information related to the exhibit. Liz uses a story about another person to initiate the collaborative examination of the exhibit. The plastinate provides her with a basis to shape the way in which they both see the exhibit. The situs inversus is examined in the light of her description of a bodily condition of an acquaintance not present in the exhibition.

The two fragments shed light on the “reality” of Body Worlds. Most visitors have not seen the inner human body in the way in which it is presented in the exhibition. They may have heard about or seen a picture of the lung of a smoker, a fatty liver or situs inversus, but only a few of them have seen the inner structure of real human bodies. The fragments reveal how the ‘realness’ of the plastinates features in the participants’ interactional examination of the exhibits. They view the plastinated bodies in the light of their knowledge of real people in- and outside the exhibition. They use this knowledge to draw others to an exhibit and see it in a particular way, for example by referring to their smoking- or eating habit. Thus, the participants make sense of the exhibits in reference to real persons and they re-view the condition of real people’s bodies in the light of the exhibit at hand.

The practices of looking at and seeing the plastinated bodies are not based on the same knowledge and resources that professions in medicine use. Even though Walter (2004b) suggests that the design of the exhibits facilitates a clinically detached gaze employed by the general public the situation in which people examine the plastinates profoundly differs from that of medics inspecting or operating on a body. When examining the plastinates people do not employ a “professional vision” (Goodwin 1994a) but they inspect the exhibits as visitors to an exhibition. Their conduct is largely civilised and displays a discipline that can be likened to that of gallery visitors as Hirschauer (2002) suggests; yet, in contrary to Hirschauer’s observation in the Munich exhibition, in London people’s experience of the plastinates arises in and through social interaction and talk. How they look at the exhibits does normally not

result from professional training and education but is informed by their everyday lives. They have learned about how to conduct themselves in exhibitions and how to examine artefacts on display. As they explore Body Worlds they gradually build up a 'history of practice and knowledge' of how to make sense of the plastinates. It transpires that in Body Worlds the production of a relationship between the exhibits and the bodies of real people can provide visitors with a very important resource when making sense of the exhibits.

Exhibiting a Body Image

There is a large corpus of research concerned with illness narratives. It explores people's experience of illness and disease through interviews and in 'naturalistic' settings, such as medical practice or at gatherings of friends and family (Charmaz & Paterniti 1998, Frank 1991, 1995). Body Worlds provides us with an opportunity to explore how people bring to bear the experience of their body when examining the plastinated bodies with others. It is a place where talk and discussion about the body and illness occur in 'naturalistic' social situations. The following fragment has been recorded at the Chess Player.

Transcript 5:

P: Is that thee:::
G: hahhhh
T: ff you seen the () overthere
G: haahh
P: Is that the (brachial plexus)
T: yah
(.3)
G: look at the sciatic there (.)
[
T: yeah
G: beautiful sciatic hahh↑
T: yes
G: hohh
T: ()
P: (have you?)
G: Actually I haven't (.) I had
P: (supposed to be)
G: ehm a nerve stuck down there
T: back pain isn't it?
G: It's like someone () shot you ()
In the back of your leg and there's nothing you can
do about
P: it's like

Image 5.1.
P T G



P: Is that thee

Image 5.2.



It begins when Pete, Tom and Gisela stand at the left side of the exhibit. After a few moments, Pete makes a first attempt to shift his companions' attention to a particular part of the exhibit, "Is that thee:::" (Image 5.1.). A few moments later, he restarts his utterance and then points and draws his companions' attention to the "Brachial Plexus", the network of nerves that conducts signals from the spine to the shoulder, arm, and hand, "Is that the (brachial plexus?)". When Tom and Gisela turn to this part of the plastinate Pete withdraws his pointing gesture and waits for an answer to his question. Tom confirms Pete's discovery, "yah"; by virtue of a gesture with his left hand transposes the brachial plexus from the exhibit onto his own body. He holds a grasping hand over his throat where he presumes the location of his brachial plexus. A moment later, Pete who still looks at Tom also forms a gesture with his right hand to display the location of his brachial plexus (Image 5.2.).

We can begin to understand how visitors to Body Worlds make sense of the exhibits by seeing them in the light of their own and the bodies of others. They discover certain aspects of an exhibit, transpose them onto their body and then talk about it in the light of the discovery of the exhibit feature. In the case at hand, Tom and Pete find the brachial plexus in the exhibit, localise where it may be inside their own bodies and then by virtue of each other's gestures see the brachial plexus of the companion. The discussion then moves on to other parts of the body. Gisela draws her companions' attention to the sciatic nerve, "look at the sciatic there". The participants establish mutual orientation to that particular exhibit feature and then briefly discuss what kind of pain the sciatic can cause in the body. They move and twitch their bodies to animate their characterisation of back pain, "back pain isn't it?". They then turn to

discuss other kinds of neuralgic pain. They mention nerve strains in their limbs and injuries they have experienced with their bodies. Gisela remembers to have had some neuralgic problems when a nerve got stuck in her left arm (Image 5.3. & 5.4.). She describes and brings to life the pain she then felt by gesturing alongside her arm, “a nerve stuck down there”. Her description of the pain in her arm occasions Tom to give a different rendition of this kind of pain. He compares Gisela’s description with a pain one may feel when a nerve gets stuck in one’s leg. As he delineates the pain he crouches and lifts his left leg to point alongside it, thus embodying the pain in his posture and gesture (Image 5.5.).

Image 5.3.



Image 5.4.



Image 5.5.



G: I had a nerve stuck down there

T: shot you in the leg

P: it's like...

The fragment reveals the reflective co-realisation of the exhibit and the body when participants examine the artefacts in interaction with others. The participants’ bodies momentarily are turned into interactive displays of a particular bodily condition that they have experienced in their lives. The exhibit features are used to evoke this bodily experience. They anatomise the plastinated body and produce an image that they momentarily transpose onto their bodies. They localise parts of the body and by virtue of talk and gestures demonstrate and animate pain and suffering they have experienced with their body. Thus, the participants exhibit and bring to bear a body image in social interaction that involves both awareness of the biological aspects of the body and the experience of a bodily condition they have once been affected by. Their acting bodies momentarily become subject to actions that project a body image

related to a bodily condition and their experience of it. The body image is produced in the interaction at and around the plastinates which in the situation at hand are gradually moved to the periphery of the action that focuses on the real human bodies of the visitors. The case at hand illuminates how participants draw on knowledge about the human body acquired by reading the text-panel, through medical training² or elsewhere. This knowledge allows them to localise a bodily feature and to identify it in using medical terminology.

Discussion: The Reality of Body Worlds

There are a variety of places and institutions that are characterised by talk about the human body; biology lessons at school, anatomy lectures, medical consultations or surgery and family gatherings, to name but a few. The creation of Body Worlds has added another institution to this list. Visitors to the exhibition discuss the plastinated bodies and bodily conditions they or people they know of have been affected by and experienced. Their talk about the body emerges in the light of their examination of the plastinates.

The study has arisen in the light of a programme of research that explores how people view and make sense of exhibits in and through talk and interaction. The research illuminates how people's experience of exhibits, artworks as well as hands-on and computer-based exhibits is influenced and shaped by their interaction with others. They examine exhibits and discuss their features and their functionality (Heath & vom Lehn 2004, Heath, vom Lehn & Osborne 2005, vom Lehn, Heath & Hindmarsh 2001). Body Worlds adds another observation to this work. This paper reveals how visitors to the exhibition use their knowledge of the human body to make sense of the plastinated bodies and their experience of the exhibit to reflect on their own and the bodies of others. Visitors inspect the plastinates, anatomise them and identify some of their features in interaction with companions. They discover exhibit features and look at them in the light of their knowledge about the affect of illness, injury or life-style (e.g. smoking, eating) on people's bodies. Their knowledge about the human body has been acquired through formal and informal education and to a large extent stems from "illness narratives" and personal experience. They use this knowledge to see the plastinates in the light of these stories of illness and bodily ailment; they discuss the biological condition of the body on display by exploring

how such a condition, such as a smoker's lung or a fatty heart, affects the lives of 'real' people.

When participants turn from the exhibits to the experience of their own body they transpose exhibit features onto their body and describe and animate a bodily experience through talk and gestures (cf. Heath & vom Lehn 2004). This transposition allows them to share in a new way with others bodily conditions they know about or have experienced. They provide others with an "account" (Radley & Billig 1996) of an illness and display and bring to life their experience of a bodily condition. The plastinates allow people to discover and make visible aspects of their body that otherwise would remain hidden under their skin. They provide them with the possibility to build up a 'resource' to link a biological condition and psychological experience of their body in social interaction at the exhibit. The paper suggests drawing on the concept of body image to characterise this resource.

There has been relatively little reference to body image in the social sciences. In recent years, Williams (1996, 2001) has drawn our attention to the concept and its potential to enhance our understanding of how people make links between the biological body, their psychological experience of the body and its relevance in social interaction. The sociological ignorance towards body image is surprising since Schilder (1950) in his original work devoted an entire chapter to the "Sociology of the Body-Image". He illuminates how children build up a body image by examining their body and its characteristics. They gradually form a psychological attitude towards their body that influences their social relationship with others (Schilder 1937). In this sense body image mediates between people's experience of their body with their being and acting in the social world.

Research in the sociology of health and illness rarely refers to body image when it examines illness narratives or investigates how people talk about pain and demonstrate suffering.³ This paper contributes to this research by exploiting the opportunities provided by the concept of 'body image' to explore how people render visible their bodily experience when they explore Body Worlds. It reveals how visitors to the exhibition build up body images and bring them to bear in their interaction with others when they examine the plastinates. These images contingently emerge in the situation when people view the exhibits. They may arise when people discover an exhibit feature or when they talk and interact with each other. The body images allow people to discuss and make sense of exhibit features as they see them in

the moment at hand. They use body images to reflect on their own bodies and those of others and to demonstrate and animate a particular experience of the body. In this sense, body image does not characterise a cognitive representation of the way in which an individual sees and experiences her own body; it is a practical accomplishment through which people render relevant their experience of a bodily condition in social interaction.

The way in which people examine the plastinates profoundly differs from the work of medical students and professionals. The latter bring to bear a “professional vision” (Goodwin 1994a) by drawing on knowledge and expertise acquired in and through medical practice. They normally encounter a human body and inspect it with regard to a particular bodily problem. In Body Worlds people’s examination of the plastinates arises as part of the visit to the exhibition. They discover exhibit features when they examine the plastinates, and then may recall a bodily condition they or someone they know of, have been affected by. They can use their discovery of the exhibit feature together with their knowledge and recollection of illness and pain to develop an *ad-hoc* understanding of the inner human body. Labels, audio-guides and knowledge of the body acquired elsewhere provide people with important additional resources to make sense of what they are looking at. At the exhibit-face visitors do not bring to bear a clinically detached gaze that can be likened to that of professions in medicine (Walter 2004b) but what people see and how it gains relevance emerges in and through the interaction at the plastinates. Thus, this paper makes a small contribution to current debates about health education and about ways in which people’s interest in their own body may be occasioned. It shows how an understanding of the body can emerge in the light of people looking at anatomic models.

Critics of Body Worlds dispute the need for the particular anatomic models used in the exhibition; plastinated, ‘real’ human bodies. Günther von Hagens (2001, 2002) argues that only this kind of model can help break down barriers between the general public and professions in medicine. They wish to provide people with information about the body that normally is accessible to medical students and doctors only and argue the possibility to examine “real human bodies” will help democratise anatomy and empower people. They hope that visitors develop knowledge about the body when inspecting the plastinates that they can use to make more informed decisions when discussing bodily conditions with a doctor. They consider the exhibition as a

resource for the “informed patient” (Henwood, Wyatt, Hart & Smith 2003, Williams & Calnan 1996) or the “reflexive consumer” (Giddens 1991). This paper reveals that in the exhibition people obtain insights into the body and its functioning that they can bring to bear when discussing bodily conditions with their companions. Whether this newly acquired knowledge is sufficient to empower them for their interaction with medical doctors or consultants is beyond the analysis. But, this knowledge may support people’s understanding of the information about their body that they receive in medical consultations.

The prime reason for the vehement controversy and critique of the exhibition is the reality of the body and their display in ‘aesthetic’ poses. Opponents of the exhibition consider the display sensationalist and object it on moral, ethical and judicial grounds and dispute its educational value (Wetz & Tag 2001). The debate about the realness of the plastinated bodies and their display in life-like poses barely resonates in the interaction at the exhibits. The ‘reality of Body Worlds’ surfaces when participants turn their own bodies into interactive displays and refer to them in interaction and discussion at the plastinates. This is when people discover the “fascination of the real”⁴.

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Note

- 1 For images and further information about the exhibition see the Body Worlds website: <http://www.bodyworlds.com>
- 2 According to surveys Body Worlds is audience is made up of approximately 30% of visitors that have some kind of medical training (Wetz & Tag 2001).
- 3 See the recent debate in this journal (Kelly & Field 1996, 1997, Williams 1996).
- 4 "Fascination of the Real" was one of the advertising slogans on posters displayed at the exhibition and elsewhere.

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